

DETAILED ACTION

Claim Objections

Claims 1, 3, 6-8, and 9 are objected to because of the following informalities:

As to claim 1, line 7, the phraseology "the matrix" should be replaced by the phraseology "the positive definite band matrix". Claim 8 is objected to for a similar reason. Appropriate correction is required.

As to claim 3, line 2, the term "autocorrelation" is incomplete and it should be replaced by the phraseology "autocorrelation of the received signal". Appropriate correction is required.

As to claim 6, line 2, the phraseology "the band symmetric factorization" should be replaced by the phraseology "the positive definite band matrix". Appropriate correction is required.

As to claim 7, the claimed subject matter of claim 7 fails to limit the subject matter of the previous claim (e.g. claim 1). Appropriate correction is required.

As to claim 7, line 2, the phraseology "according the method" should be replaced by the phraseology "according to the method". Appropriate correction is required.

As to claim 9, the claimed subject matter of claim 9 fails to limit the subject matter of the previous claim (e.g. claim 1). Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 appears to be an apparatus with no structural elements, therefore, claim 8 must be amended in such a way as to comply with the current U.S. practice.

According to MPEP 2114 an apparatus is what a device is rather than what a device does "a claim directed to an apparatus must be distinguished from the prior art in terms of structure rather than function..., a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus teaches all the structural limitations of the claim."

Further, the preamble of Claim 8 recites an apparatus but the body of the claim recites method steps. It is not clear whether claim 8 is an apparatus claim or a method claim.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 8-9 are rejected under 35 U.S.C. 101 because claim 8 is directed to neither a "process" nor a "machine", but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 see MPEP 2173.05(p) [R-5].

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kim (US 2004/0170229) see figure 4, Guglielmi et al (US 5,751,768) see figure 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRESHTEH N. AGHDAM whose telephone number is (571)272-6037. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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